

**LISTING OF THE CLAIMS**

1. (Previously Amended) A control device, comprising:  
a plurality of inputs to respectively receive an input real value;  
a plurality of outputs to respectively output a digital output value;  
a memory to store setpoint values relating to the inputs and outputs; and  
an allocator to allocate a digital output value to one of the digital outputs as a function of a comparison of at least one of the input real values with a corresponding setpoint value, the setpoint values respectively including one of the state values 1, 0 and independence state value, applicable to at least one of the setpoint values in the memory, and the allocation of a digital output value to one of the digital outputs being capable of being carried out by the allocator independently of the at least one input real value whose allocated setpoint value includes the independence state value.
2. (Previously Amended) The control device as claimed in claim 1, further comprising a first evaluator for converting input raw values into digital input values for the further processing as input real values.
3. (Previously Amended) The control device as claimed in claim 2, further comprising a second evaluator, connected downstream of the first, for allocating the digital input values to logical input states for the further processing as input real values.
4. (Previously Amended) The control device as claimed in claim 1, wherein a plurality of sets of setpoint values are respectively being storable for an output value or set of output values in the memory.

5. (Previously Amended) The control device as claimed in claim 1, further comprising a safety instrument by which the equipment to be controlled can be switched to a safety state.
6. (Previously Amended) The control device as claimed in claim 5, wherein the safety instrument switches to the safety state if the input real values deviate from the corresponding setpoint values for more than a predetermined time.
7. (Previously Amended) The control device as claimed in claim 5, wherein the sets of setpoint values are checked with a check sum at fixed time intervals.
8. (Previously Amended) A method for controlling equipment, comprising:
  - receiving a plurality of input real values;
  - providing setpoint values relating to inputs and outputs;
  - establishing a digital output value as a function of a comparison of at least one of the input real values with a corresponding one of the setpoint values; and
  - outputting the digital output value, an independence state value being applied to at least one of the setpoint values, the digital output value being established independently of the at least one input real value whose allocated setpoint value includes the independence state value, wherein the setpoint values respectively include one of the state values 1, 0 and independence state value.

9. (Previously Amended) The method as claimed in claim 8, wherein the reception of a plurality of input real values includes conversion of input raw values into digital input values for the further processing as input real values.

10. (Previously Amended) The method as claimed in claim 9, wherein the digital input values are allocated to logical input states for the further processing.

11. (Previously Amended) The method as claimed in claims 8, wherein a plurality of sets of setpoint values are respectively provided for an output value or set of output values.

12. (Previously Amended) The method as claimed in claim 8, wherein the equipment to be controlled is switched to the safety state if the input real values deviate from the corresponding setpoint values for more than a predetermined time.

13. (Previously Amended) The method as claimed in claim 8, wherein the setpoint values are checked with a check sum at fixed time intervals, and the equipment to be controlled is optionally switched to a safety state.

14.-15. (Cancelled)

16. (Previously Presented) The control device as claimed in claim 2, wherein a plurality of sets of setpoint values are respectively being storable for an output value or set of output values in the memory.

17. (Previously Presented) The control device as claimed in claim 3, wherein a plurality of sets of setpoint values are respectively being storable for an output value or set of output values in the memory.

18. (Previously Presented) The control device as claimed in claim 6, wherein the sets of setpoint values are checked with a check sum at fixed time intervals.

19. (Previously Presented) The method as claimed in claims 9, wherein a plurality of sets of setpoint values are respectively provided for an output value or set of output values.

20. (Previously Presented) The method as claimed in claims 10, wherein a plurality of sets of setpoint values are respectively provided for an output value or set of output values.

21. (Previously Presented) A control device, comprising:  
input means for respectively receiving an input real value;  
output means for respectively outputting a digital output value;  
memory means for storing setpoint values relating to the inputs and outputs; and  
allocation means for allocating a digital output value to one of the digital outputs as a function of a comparison of at least one of the input real values with a corresponding setpoint value, the setpoint values respectively including one of the state values 1, 0 and independence state value, applicable to at least one of the setpoint values in the memory means, and the allocation of a digital output value to one of the digital outputs being capable of being carried out by the allocation means independently of the at least one input real value whose allocated setpoint value includes the independence state value.